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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/326,163	06/04/1999	CHARLES WU	MSI347US	3844

22801 7590 11/07/2002

LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER

CALDWELL, ANDREW T

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 11/07/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/326,163

Applicant(s)

WU, CHARLES

Examiner

Andrew Caldwell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 6) ☐ Other:

Remarks

1. Claims 1-33 are pending.
2. Please note that no copies were provided of the last 5 U.S. Patents cited on the Form 892 attached to this Office action. Since the Applicant is a named inventor on each of the patents at issue, no copies will be provided.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins, U.S. Patent No. 5,884,323, in view of Harari et al., U.S. Patent No. 5,887,145.

1. Regarding claim 1, the preamble will be given patentable weight since the claim body refers back to the preamble. See the first device at lines 4 and 6. Hawkins teaches the invention substantially as claimed by disclosing:

- a. A first device (Fig. 1 elem. 110 handheld) and a second device (Fig. 1 elem. 150 PC);
- b. Practicing a method comprising:

- i. Identifying storage volumes associated with the first device (col. 9 line 58 to col. 10 line 8 memory card number as parameter to API function call opening database on the handheld; col. 7 lines 24-29);
 - ii. Synchronizing objects contained in storage volumes that are currently accessible to the first device (col. 4 lines 37-42).
2. Hawkins does not explicitly teach a first device that is capable of communicating with a storage volume that can become inaccessible to the first device and a method wherein the step of identifying storage volumes identifies storage volumes currently accessible to the first device. Hawkins does however teach that the PC uses an API call that requires a memory card number as a parameter when opening a particular database on the handheld computer/first device (col. 9 line 58 to col. 10 line 8).
3. Harari on the other hand teaches a handheld computer including a removable memory card (Figs. 1 and 3). Harari therefore teaches a storage volume/memory card that can become inaccessible to the first device/handheld since a memory card is inaccessible when it is removed.
4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Harari's removable memory card with the handheld of Hawkins because of Hawkins' suggestion that the handheld includes memory cards (col. 9 line 58 to col. 10 line 8).
5. The combination of Hawkins in view of Harari does not explicitly teach a method wherein the step of identifying storage volumes identifies storage volumes currently accessible to the first device. However, this feature is implicit in the teachings of the

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combination of Hawkins in view of Harari based on logical reasoning. Hawkins teaches that the PC's API includes a remote procedure call for opening a database on the handheld (col. 7 lines 24-29). Hawkins also teaches that this API function call may return successfully (col. 9 line 65 to col. 10 line 8), which implies that the function call may also return unsuccessfully. If the database cannot be opened, the memory card must be inaccessible. If the database can be opened, the memory card must be accessible. The combination of Hawkins in view of Harari therefore identifies storage volumes currently accessible to the current device when opening the databases.

6. Regarding claim 2, the combination of Hawkins in view of Harari teaches a method further including identifying storage volumes previously accessible to the first device but not currently accessible to the first device (col. 9 line 58 to col. 10 line 8 unsuccessful return of SyncOpenDB).

7. Regarding claim 3, the combination of Hawkins in view of Harari teaches the additional limitations of claim 3. As to the first limitation, it is identical to the one addressed above in claim 2 and is therefore rejected for the same reasons. As to the step of while synchronizing, ignoring objects stored on volumes not currently accessible to the first device, a person of ordinary skill in the art at the time the invention was made would reasonably infer that the combination of Hawkins in view of Harari implicitly teaches this limitation. If the SyncOpenDB function call does not return successfully, the system cannot synchronize that particular database. If the database cannot be synchronized, the system must skip or ignore the database in the current round of synchronization.

8. Regarding claim 4, Hawkins teaches a method wherein each object comprises a plurality of data items (col. 4 lines 2-9). Hawkins also teaches a method wherein the synchronizing step further comprises synchronizing data items in one object with corresponding data items in another object (col. 4 lines 2-9 synchronizing database in handheld with database in PC).

9. Regarding claim 5, Hawkins teaches a method wherein the objects are databases (col. 4 lines 2-9).

10. Regarding claim 6, the combination of Hawkins in view of Harari teaches a method wherein the first device identifies storage volumes currently accessible to the first device (col. 9 line 58 to col. 10 line 8 successful return of SyncOpenDB).

11. Regarding claim 7, Harari teaches a method wherein the storage volume is a removable memory card configured to be inserted into the first device (Figs. 1 and 3).

12. Regarding claim 8, Hawkins teaches a method wherein the first device is a portable computing device (Fig. 1 elem. 110 handheld).

13. Regarding claim 9, Hawkins teaches a method wherein the second device is a desktop computer (Fig. 1 elem. 150 PC).

14. Regarding claim 10, the combination of Hawkins in view of Harari implicitly teaches this limitation. Hawkins teaches that the personal computer holds databases that are synchronized with those on the handheld (col. 4 lines 37-42). Even if the Hawkins synchronization program cannot successfully open the database on the handheld, a person of ordinary skill in the art would reasonably infer that the database on the PC can be changed regardless of whether the handheld can access the

database on the PC since this is to be the point of the whole synchronization process.

The PC therefore continues to monitor and record changes to items in the PC databases, which have corresponding entries in the databases on the handheld. The combination of Hawkins in view of Harari therefore teaches a method further comprising the second device continuing to monitor and record changes to objects stored on storage volumes that are inaccessible to the first device.

15. Regarding claim 11, Hawkins teaches this limitation. When the handheld is not in communication with the PC, the databases/storage volumes on the PC are inaccessible. When the handheld is able to communicate with the PC, the databases on the PC become accessible, and the items within the corresponding databases are synchronized.

16. As to claim 12, it is a computer readable media claim corresponding to method claim 1. Since it does not teach or define above the information in the corresponding method claim, it is rejected under the same basis.

17. Regarding claim 13, Hawkins teaches the invention substantially as claimed by disclosing a method comprising:

- c. Storing an object on a storage device on a portable computer (col. 4 lines 2-9 and 37-42);
- d. Creating an association between the object and a corresponding object on the base computer (col. 4 lines 2-9 and 37-42);
- e. Synchronizing the object stored on the storage device with the corresponding object on the base computer (col. 4 lines 2-9 and 37-42).

18. Hawkins does not explicitly teach a method wherein: (a) the storage device is removable and configured to be inserted into and removed from the portable computer; and (b) the corresponding objects are synchronized if the removable storage device is inserted into the portable computer. Hawkins does however teach that the PC uses an API call that requires a memory card number as a parameter when opening a particular database on the handheld computer/first device (col. 9 line 58 to col. 10 line 8).

19. Harari on the other hand teaches a handheld computer including a removable memory card (Figs. 1 and 3). Harari therefore teaches a storage volume/memory card that can become inaccessible to the first device/handheld since a memory card is inaccessible when it is removed.

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Harari's removable memory card with the handheld of Hawkins because of Hawkins' suggestion that the handheld includes memory cards (col. 9 line 58 to col. 10 line 8).

21. The combination of Hawkins in view of Harari does not explicitly teach a system in which the corresponding objects are synchronized if the removable storage device is inserted into the portable computer. However, the combination teaches this limitation through logical reasoning. Hawkins teaches that the SyncOpenDB remote function call returns successfully if the database on the remote device can be opened. If the PC in the combination of Hawkins in view of Harari attempts to open a database on the handheld when the memory card is not inserted, SyncOpenDB will not successfully

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return and the database will not be opened. When this happens, logical reasoning suggests that the PC will not attempt to synchronize a database that it cannot open.

22. Regarding claim 14, Hawkins teaches a method wherein the object comprises a plurality of items and the corresponding object on the base computer comprises a plurality of corresponding items (col. 4 lines 2-9 and 27-42).

23. Regarding claim 15, Hawkins teaches a method wherein the object comprises a plurality of items and the corresponding object on the base computer comprises a plurality of corresponding items (col. 4 lines 2-9 and 37-42), and wherein the synchronizing the object further comprises synchronizing data items in the object with the corresponding data items in the corresponding object on the base computer (col. 4 lines 2-9 and 37-42).

24. Regarding claim 16, Hawkins teaches a system wherein the portable computer determines whether the removable storage device is inserted into the personal computer (col. 9 line 58 to col. 10 line 8 SyncOpenDB as remote procedure call from PC to handheld).

25. Regarding claim 17, the combination of Hawkins in view of Harari implicitly teaches this limitation. Hawkins teaches that the personal computer holds databases that are synchronized with those on the handheld (col. 4 lines 37-42). Even if the Hawkins synchronization program cannot successfully open the database on the handheld, a person of ordinary skill in the art would reasonably infer that the database on the PC can be changed regardless of whether the handheld can access the database on the PC since this is to be the point of the whole synchronization process.

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The PC therefore continues to monitor and record changes to items in the PC databases even when the SyncOpenDB function unsuccessfully returns (col. 9 line 58 to col. 10 line 8).

26. As to claim 18, it is a computer readable media claim corresponding to method claim 13. Since it does not teach or define above the information in the corresponding method claim, it is rejected under the same basis.

27. Regarding claim 19, it is a method claim similar in scope to claim 1 except for the following additional limitations: (a) each storage volume contains at least one object and wherein each object contains a plurality of data items; and (b) synchronizing *only* objects in currently accessible storage volumes. As to point (a), Hawkins teaches a system that synchronizes databases (col. 4 lines 2-9 and 27-42). The database is an object, and databases contain multiple items. As to point (b), Hawkins teaches that the SyncOpenDB function returns successfully if the database on the handheld can be opened. If the database cannot be opened, this function would not successfully return. The PC software would recognize this condition and not attempt to synchronize a database that cannot be opened.

28. Regarding claims 20-23, they introduce additional limitations identical to those of claims 2-3, 7, and 10 discussed above. Since the remarks given above with respect to claims 1-3, 7, and 10 apply equally here, they will not be repeated.

29. As to claim 24-28, they are computer readable media claims corresponding to method claim 19-23, respectively. Since they do not teach or define above the

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information in the corresponding method claims, they are rejected under the same basis.

30. As to claim 29-32, they are apparatus claims corresponding to media claims 25 and 27-28, respectively. Since they do not teach or define above the information in the corresponding method claims, they are rejected under the same basis.

31. As to claim 31, Hawkins teaches a system wherein the apparatus is a desktop computer (Fig. 1 elem. 150).

32. As to claim 33, the remarks given above with respect to claim 11 apply equally to claim 33 and will not be repeated.

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Conclusion

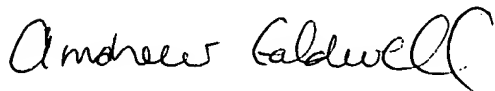
33. A shortened statutory period for response to this action is set to expire **three months** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Caldwell, whose telephone number is (703) 306-3036. The examiner can normally be reached on M-F from 9:00 a.m. to 5:30 p.m. EST.

If attempts to reach the examiner by phone fail, the examiner's supervisor, Meng-Ai An, can be reached at (703) 305-9678. Additionally, the fax numbers for Group 2100 are as follows:

Official Responses:	(703) 746-7239
After Final Responses:	(703) 746-7238
Draft Responses:	(703) 746-7240

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 305-3900.



Andrew Caldwell
703-306-3036
November 2, 2002